

ABSTRACT

The present invention provides methods and apparatus in which a surgical retractor comprises a plurality of mechanically coupled tissue retaining walls that are guided into position along one or more guides previously implanted into the patient. The walls are preferably coupled by pivots, so that separating some of the walls from one another opens an operating space. There are preferably two guides, which are driven or screwed into the pedicles of vertebrae, or other bone. Since practical considerations will usually mean that the guides are not generally parallel to one another, the guides are capable of polyaxial movement with respect to the pedicles, and retractor is provided with oversized channels to receive the guides. The channels may be conveniently disposed in a frame, which also serves to hold lock the walls apart. Various convenience features are contemplated including a web disposed between the walls, which expands as the walls are separated. Also contemplated are projections from near the bottoms of one or more of the walls, which can alternatively or additionally help to hold the underlying tissue in place.